

May 22, 2008

**MEMORANDUM**

To: Allen Gaither

From: Brian Wootton

Subject: Application for Permit to Construct,  
East Carolina Regional Landfill–MSW Landfill  
Bertie County  
Proposed Phase 5 Expansion  
Design Hydrogeologic Study (Volume I of II) - Final Comments  
Permit No. 08-03  
Document No. 4589

I have reviewed the Landfill Expansion /Permit Modification (dated July 7, 2007, the revised application dated February 13, 2008, and most recent supporting documentation submitted May 5, 2008), pertaining to hydrogeology for the proposed expansion of the landfill from 5 acres to 7 acres. The Water Quality Plan has been amended to abandon groundwater monitoring well, FA-1 and the continued sampling of existing groundwater monitoring wells FA-2, FA-3, FA-4, and existing surface water sampling point, "Site 4" (located 130 feet southwest of groundwater monitoring well, FA-3) on a semi-annual basis. Since these wells and sampling point have historically been sampled, no background sampling is necessary. The following constituents, Zinc and Boron have been added to the sampling program. The total constituents in the sampling program now include: Zinc, Boron, RCRA Metals, Chloride, Total Dissolved Solids, Specific Conductivity, pH, Turbidity, and Temperature. **The Study and supporting information meets the hydrogeological criteria required in the Rules [15A NCAC 13B .0500]; therefore, I have no objection to issuance of this portion to Permit to Construct based on these rules.**

**\*Prior to construction activities commencing, the Solid Waste Section requests the following information to be addressed from the permittee.**

Prior to construction of cell(s), all piezometers, ground-water monitoring wells, and borings, located in the proposed cell(s), shall be properly abandoned in accordance with 15A NCAC 2C.0113(b)(1), titled "Abandonment of Wells".

- a. In areas where soil is to be undercut, abandoned wells should not be grouted to pre-grade land surface, but to the proposed base grade surface to prevent having to cut excess grout and possibly damaging the wells.

- b. Well abandonment records for each piezometer, ground-water monitoring well and boring shall be certified by the permit holder's geologist and submitted to the Solid Waste Section in accordance with 15A NCAC 02C.0114(b).

\*Note: These well abandonment conditions noted above have also been stated in the letter from me written May 16, 2008 (Document No. 4115) to Louisiana Pacific Corporation.

**Construction Conditions: (Include these conditions stated below, in the Permit to Construct)**

The owner's geologist shall examine the cell excavation and note any pertinent geologic features exposed during the construction process and shall notify the Solid Waste Section Hydrogeologist of these findings prior to placement of any liner materials.

The owner's geologist shall be in the field to supervise any additional ground-water monitoring well installations. Any modifications to the approved water quality monitoring plan require approval by the Section Hydrogeologist. Documentation of all changes to the approved plan shall be submitted with the well construction records.

For each well constructed, a well construction record, well schematic, boring log, and a description of well development activities shall be submitted to the Section within 30 days of well completion.

After well completion, provide a scaled map depicting the location of the new ground-water monitoring wells; existing ground-water monitoring wells, and abandoned ground-water monitoring wells.

Please contact me with any questions or comments. I can be reached at (919) 508-8524 or by e-mail.

Sincerely,



Brian Wootton

cc: Ed Mussler, Solid Waste Section  
Hugh Jernigan, Solid Waste Section  
Central File